March, 1997 and during April' 96-March '97 is as given below:

| Gujarat | (All figures in MU) | |
|---|---|---|
| | March '97 | April '96 March '97 |
| Requirement | 3565 | 38225 |
| Availability | 3228 | 35111 |
| Shortage | 337 | 3111 |
| % | 9.5 | 8.1 |
| Madhya Pradesh | | |
| Requirement | 3360 | 33045 |
| Availability | 2766 | 29096 |
| Shortage | 594 | 3949 |
| /o | 17.7 | 12 |

The' Central Government supplements the efforts of the States in maximising availability of power by giving firm share and also shares in unallocated power from Central Sector generation stations. The detail of Gujarat & M.P.'s actual entitlement and actual drawal from the Western grid during March' 97 and during April' 96—March' 97 is as under:

(All figures in MU)

| Gujarat: | March' 97 | April' 96-March' 97 |
|---|---|---|
| Entitlement | 796.5 | 8624.2 |
| Drawal | 906.6 | 10151.5 |
| Madhya Pradesh | | |
| Entitlement | 949.7 | 1124.0 |
| Drawal | 906.6 | 11807.0 |

Gujarat & M.P. had also availed assistance of 92.8 MU & 41.5 MU respectively from neighbouring Northern region during April'96—March'97.

Madhya Pradesh also received assistance of 305.6 MU from Rajasthan & 39.5 MU from Andhra Pradesh. Private Sector investment in power sector is also being encouraged to meet the growth in demand of power.

**Damage to power equipments due to frequency fluctuations**

3613. SHRIMATI KAMLA SINHA: ] Will the PRIME MINISTER be pleased ! to state:

(a) whether it is a fact that power equipments worth crores of rupees have been damaged because of wide fluctuations in the frequency of power transmission in the grids, especially in the Eastern and Western grids:

(b) if so, whether Government have made ?ny inquiry into the mismanagement of the Grid Operations;

(c) if so, the details thereof; and

(d) what action has" been taken by Government in this regard?

THE MINISTER OF STATE IN THE MINISTRY OF POWER (DR. S. VENUGOPALACHARI): (a) As per the information available no damage of equipments due to wide frequency fluctuations in the Western Region has been reported.

As per the information available, certain equipments have been damaged due to high frequency operation of the Eastern Regional Power Grid, The details of damages are given below:

| State System | Station | Unit | Capacity (MW) | Damage |
|---|---|---|---|---|
| DVC | Bokaro 'B' | 2 | 210 | Turbine blade failure |
| WBPDCL | Kolaphat | 5 | 210 | Turbine blade failure |
| WBPDCL | Kolaphat | 3 | 210 | Cracks in Brazing of lacing wires. |

| State/ System | Station | Unit | Capacity (MW) | Damage |
|---|---|---|---|---|
| BSEB | Patratu | 1&3<br>9 | 50<br>110 | Turbine blade failuVe |
| CESC | South Gen. Stations | 1 | 67.5 | Turbine blade failure |
| DVC | Durgapur | 4 | 210 | Regulatory stage liner damage. |

GRID CO has also reported turbine failure in power stations of National Aluminium Ltd. (NALCO) & Indian Charge Chrome Ltd. (ICCL).

(b) and (c) Central Electricity Authority has set up an Enquiry Committee to look into various aspects of the problem and suggest remedial measures for avoiding recurrence of the problem. The Enquiry Committee has not yet submitted the report.

(d) High frequency operation of the Eastern Regional grid is mainly due to a very low off-peak demand resulting in

high peak/off-peak demand ratio. In order to export the off-peak surplus power from Eastern Region to the neighbouring regions transfer of power from Eastern Region to North Eastern Region (Assam — 100 MW). Sourthern Region (Andhra Pradesh — 150 MW) has been arranged. Further for transfer of power from Eastern Regional to Western Region (Madhya Pradesh — 150 MW) and to Northern Region (100 — 150 MW) action is in process. The Inter-Regional high voltage HVDC link between Eastern Region and Southern Region js under construction and will be ready by February. 1999. This will enable transfer of 500 MW additional power from Eastern Region to Southern Region. To augment the transfer of surplus power from Eastern Region to North Eastern Region. Power grid is excecuting 400 KV double circuit line between Bongaigaon (NER) and Malda (ER). Construction of this line is expected to be completed in a year. This will enable exchange of 700-800 MW power between Eastern Region and North Eastern Region.

Member (Grid Operation). Central Electricity Authority has also written to all the Chairman of the constituent utilities in the Eastern Region to ensure proper load management for maintaining the frequency within permissible limits.

**Demand and Generation of Power in Delhi**

3614. SHRI NILOTPAL BASU: Will the PRIME MINISTER be pleased to

state:

(a) the power demand in Delhi in the peak hours and how much of it is being generated by the$_4$ State.

(b) how much power is being supplied to Delhi out of Northern Grid's total capacity of 17,000 MW;

(c) whether Government are aware that the Central Electricity Authority (CEA) has claimed that they are supplying between 1150 and 1380 MWs of power to Delhi; and

(d) if so, what is the power situation in Delhi.

THE MINISTER OF STATE IN THE MINISTRY OF POWER (DR. S. VENUGOPALACHAR1): (a) At present, the demand in Delhi during peak hours is around 2100 MW, the generation at Delhi Vidyut Board's (DVB) power stations is 350 MW and the generation at Badarpur Thermal Power Station (BTPS) is about 400 MW.